INTERMEDIATE FREQUENCY SIGNAL AMPLITUDE EQUALIZER FOR

MULTICHANNEL APPLICATIONS

ABSTRACT OF THE DISCLOSURE

A multichannel signal amplitude equalizer (102) includes a multichannel signal input (112) that carries an input signal with an input bandwidth spanning multiple communication channels. The equalizer also includes a multichannel equalizer (114) connected to the multichannel signal input (112) and that includes a signal output (116). The multichannel equalizer (114) connects to an equalizer control input (130) for regulating the multichannel equalizer (114) to attenuate selected frequency bands in the input signal. As a result, the signal output (116) carries, as an output signal, the input signal reduced in dynamic range. The equalizer (102) generally includes an analog to digital (A/D) converter (122) coupled to the multichannel equalizer (114) for digitizing the output signal. The A/D converter (122) is characterized by an A/D converter dynamic range that is at least equal to the output signal dynamic range and a bandwidth at least equal to the input bandwidth.